

? b 155
 07mar02 14:21:22 User208669 Session D1975.
 \$0.37 0.106 DialUnits File1
 \$0.37 Estimated cost File1
 \$0.40 TYMNET
 \$0.77 Estimated cost this search
 \$0.77 Estimated total session cost 0.106 DialUnits

File 155.MEDLINE(R) 1966-2002/Mar W1

Set Items Description

 ? s parvo?

S1 6145 PARVO?
 ? s origin and replication

128053 ORIGIN

89940 REPLICATION

S2 6695 ORIGIN AND REPLICATION

? s1 and s2

6145 S1

6695 S2

S3 48 S1 AND S2

? t s3/7/11 12

3/7/11 DIALOG(R)File 155.MEDLINE(R)
 09598482 98037616 PMID: 9371565

Analysis of the internal replication sequence indicates that there are three elements required for efficient replication of minute virus of mice minigenomes.

Brunstein J; Astell CR

Department of Biochemistry and Molecular Biology, Faculty of Medicine, University of British Columbia, Vancouver, Canada.

Journal of virology (UNITED STATES) Dec 1997, 71 (12) p9087-95,
 ISSN 0022-538X Journal Code: KCV
 Languages: ENGLISH
 Document type: Journal Article
 Record type: Completed

Prior analysis of minigenomes of minute virus of mice carried out by our laboratory indicated that sequences within the region of nucleotides 4489 to 4695, inboard of the 5' palindrome, are required for efficient DNA replication of the virus and are the site of specific interactions with unidentified factors present in a host cell nuclear extract (P. Tam and C.

R. Astell, Virology 193:812-824, 1993; P. Tam and C. R. Astell, J. Virology 68:2840-2848, 1994). In order to examine this region in finer detail, a comprehensive library of linker-scanning mutants spanning the region was tested for the ability to support replication of minigenome constructs and

for the ability to interact with host cell factors. Three short discrete sequence elements critical for replication competence were observed. Binding of host cell nuclear factors was localized to four sites, with two major complexes each appearing to have two binding sites within the region. All factor binding sites were found to be directly adjacent to or overlapping with sequence elements contributing to replication competence, and evidence suggesting a correlation between factor binding and minigenome replication is presented. A possible model is proposed for function of a viral origin within the region of the internal replication sequence which addresses the still-unresolved problem of how parvoviruses overcome the thermodynamic energy barrier involved in the rearrangement of the 5'-terminal palindrome from an extended form to a hairpin conformation.

Record Date Created: 1997/12/24

3/7/12

DIALOG(R)File 155.MEDLINE(R)
 09598475 98037608 PMID: 9371557

Directed integration of minute virus of mice DNA into episomes.

Corsini J; Tal J; Winocour E

Ben-Gurion University of the Negev, Beer-Sheva, Israel.

Journal of virology (UNITED STATES) Dec 1997, 71 (12) p9008-15,
 ISSN 0022-538X Journal Code: KCV
 Languages: ENGLISH
 Document type: Journal Article
 Record type: Completed

Recent studies with adeno-associated virus (AAV) have shown that site-specific integration is directed by DNA sequence motifs that are present in both the viral replication origin and the chromosomal preintegration DNA and that specify binding and nicking sites for the viral regulatory Rep protein. This finding raised the question as to whether other parvovirus regulatory proteins might direct site-specific recombination with DNA targets that contain origin sequences functionally equivalent to those described for AAV. To investigate this question, active and inactive forms of the minute virus of mice (MVM) 3' replication origin, derived from a replicative-form dimer-bridge intermediate, were propagated in an Epstein-Barr virus-based shuttle vector which replicates as an episome in a cell-cycle-dependent manner in mammalian cells. Upon MVM infection of these cells, the infecting genome integrated into episomes containing the active-origin sequence reported to be efficiently nicked by the MVM regulatory protein NS1. In contrast, MVM did not integrate into episomes containing either the inactive form of the origin sequence reported to be inefficiently nicked by NS1 or the active form from which the NS1 consensus nick site had been deleted. The structure of the cloned MVM episomal recombinants displayed several features previously described for AAV episomal and chromosomal recombinants. The findings indicate that the rules which govern AAV site-specific recombination also apply to MVM and suggest that site-specific chromosomal insertions may be achievable

with different autonomous parvovirus replicator proteins which recognize binding and nicking sites on the target DNA.

Record Date Created: 19971224

? log hold

07mar02 14:24:44 User208669 Session D1975.2

\$2.08 0.650 DialUnits File155

\$0.00 48 Type(s) in Format 6

\$0.42 2 Type(s) in Format 7

\$0.42 50 Types

\$2.50 Estimated cost File155

\$0.26 TYMNET

\$2.76 Estimated cost this search

\$3.53 Estimated total session cost 0.757 DialUnits

Logoff: level 02.02.11 D 14:24:44